Missouri Botanical Garden
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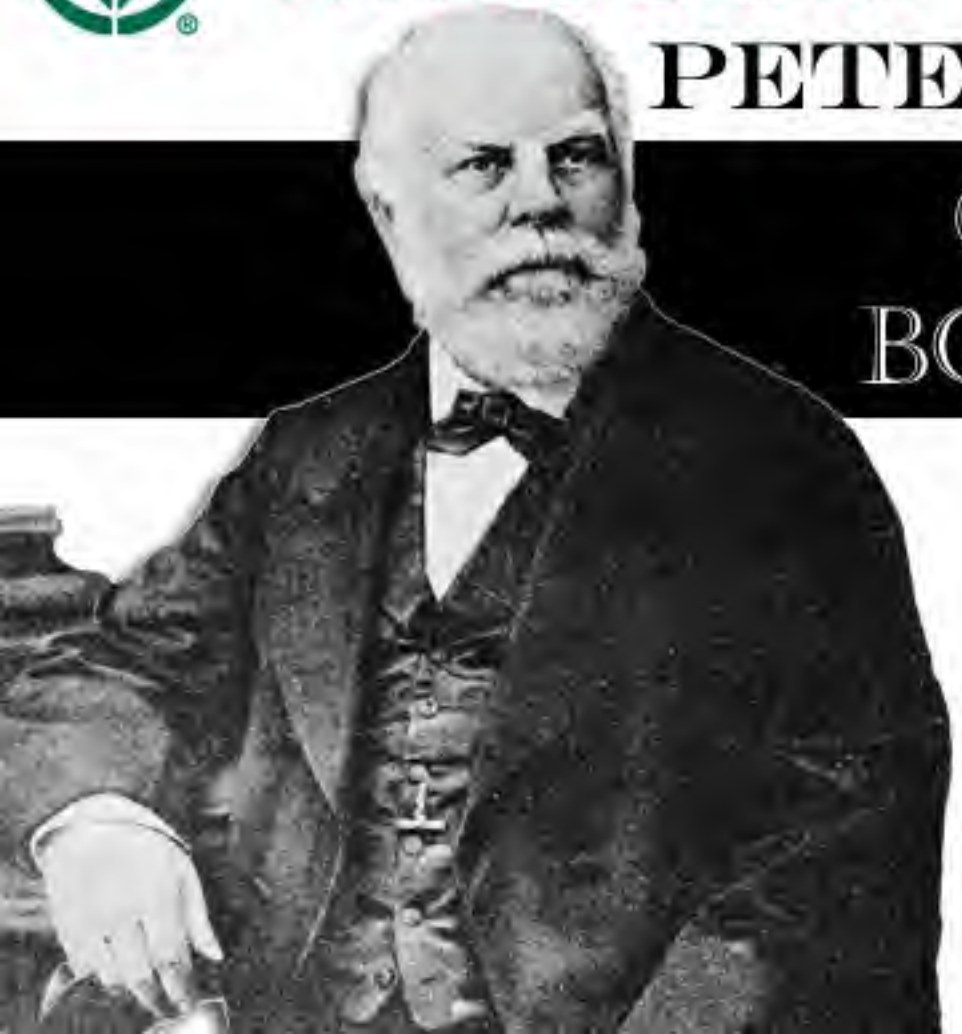
George Engelmann Botanical Notebooks



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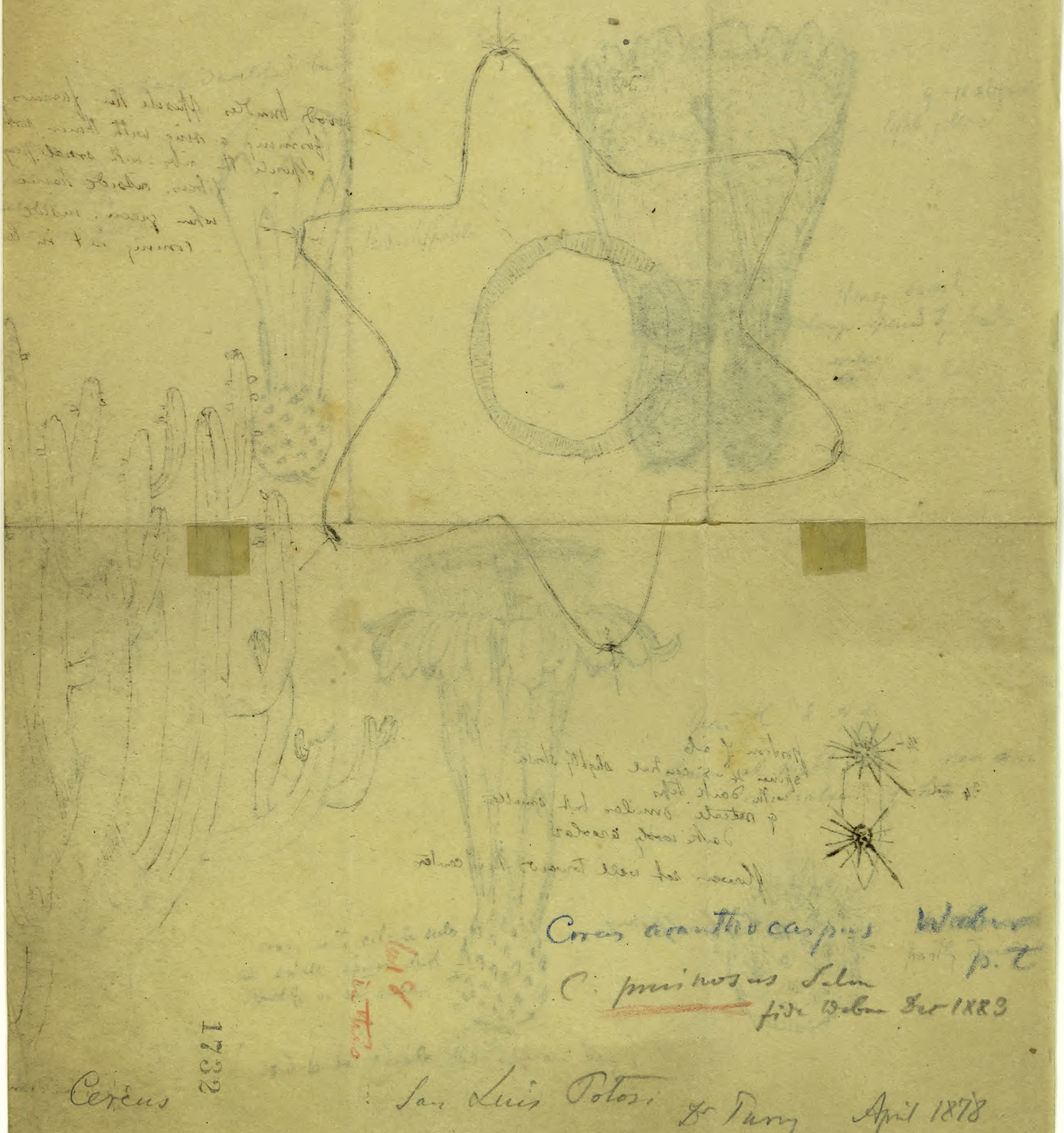

Cereus 1733

San Luis Potosi Dr Parry April 1878

Cereus acanthocarpus Watson
C. pringlei S. Wats
fide Orcutt Rev 1923
p. 7

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cm
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MISSOURI BOTANICAL GARDEN

№ 276

Arborescent Cereus ?, near San Luis Potosi. rare in cultivation said to be plenty in Sierras

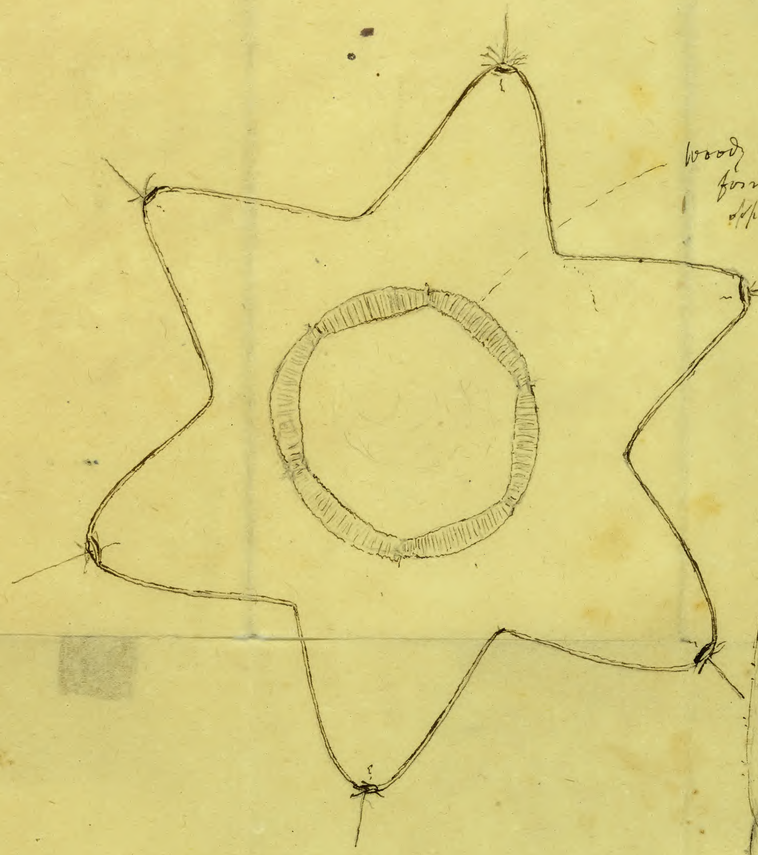
April 13th 1878

C C Parry.

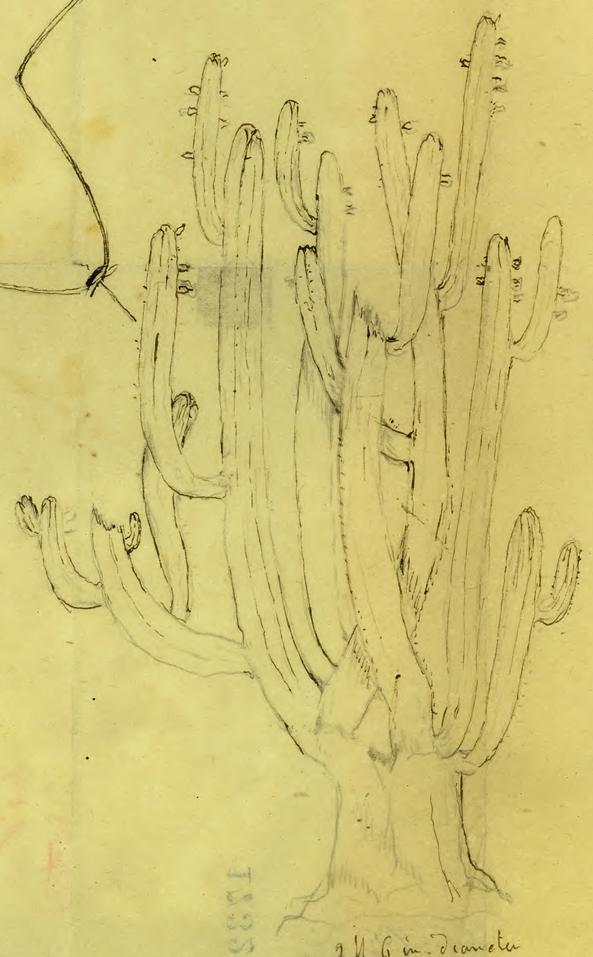
the common Pitaya of the markets of San Luis etc

Trunk 2ft 6 inch diameter at base!
irregularly & densely branched 3ft up
22 ft high - branches 3 to 12 ft!

Section of ordinary branch nat Size 6ft long

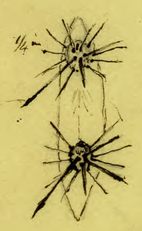


woody bundles opposite the furrows forming a ring with thinner portions opposite the ribs - with small projecting fibers, outside tissue peeling off when green, inside cellular pith coming out in lenticular flakes



22 ft high

2ft 6 in. diameter



3/4 nat

1/4

postern of ribs
spines 4-5 central slightly stouter with dark tips
& radiate - similar but smaller
Dark woody areolar
flowers set well towards the center

10 - 16 spines

nearly developed bud

Reddish purple

dull purple midrib
light tips + edges

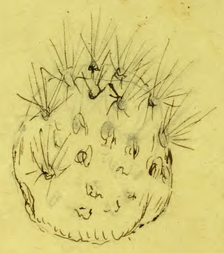
9 - 11 stigmas
light yellow

Honey cavity always opened by birds

ovules
seed with long branching funicule

open fl. 8 A.M.

opens at night closes noon or earlier if hot



old seed vessel partly denuded

waxy with ciliate scales and small spines which develop as seed matures

{said to be edible but appear dry}

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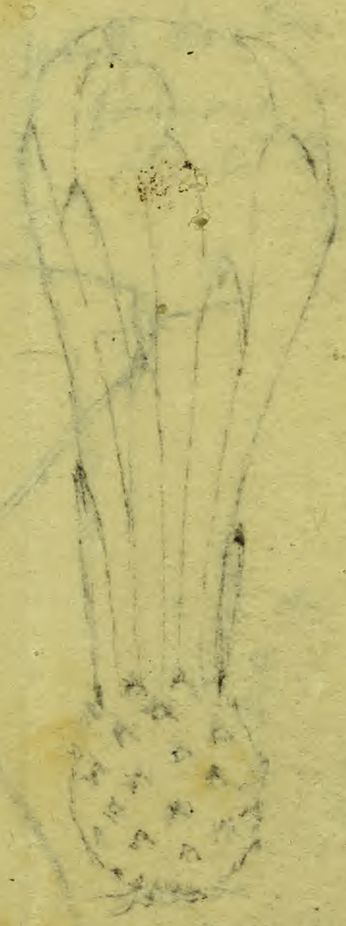

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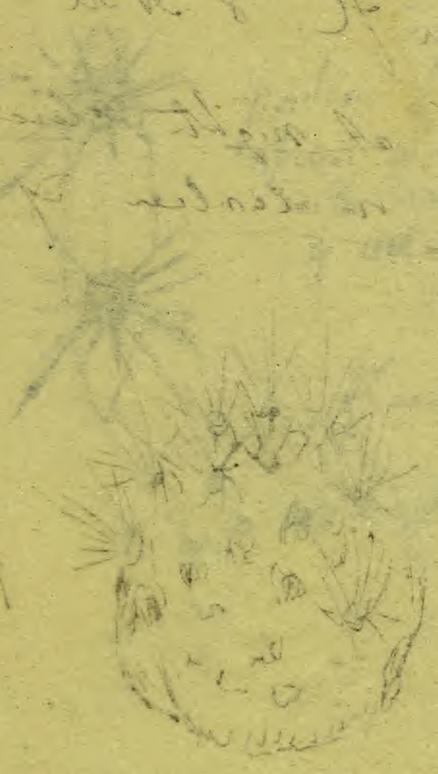

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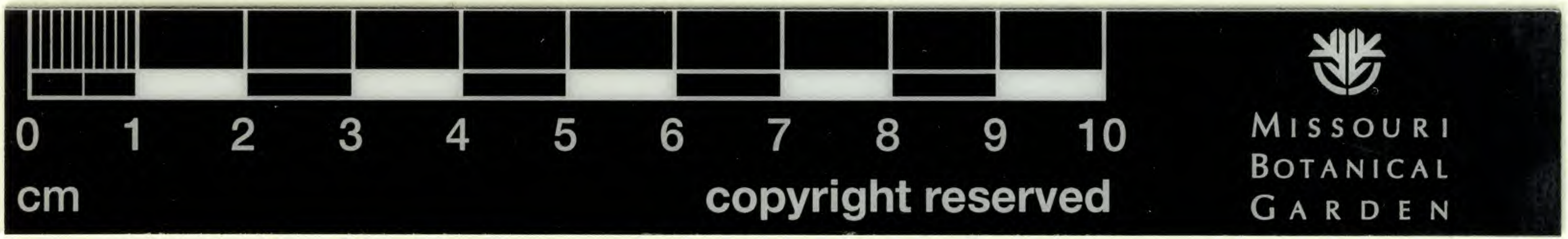
This is probably the same as Ehrenberg's: "Cer glaucus Hook ?"
Linnaea 19. 365. "? Palaeya" 20 fach hoch, Stengel
"blaulich bereift, ganz wie die grünen Theile, mit
weissen abstehenden Haaren."

Dann 1840 mitgebracht, Chihuahua 1843 Berlese

1733



Dr. Engelmann is an Essex, but have
not heard from him for 2 or
3 weeks.

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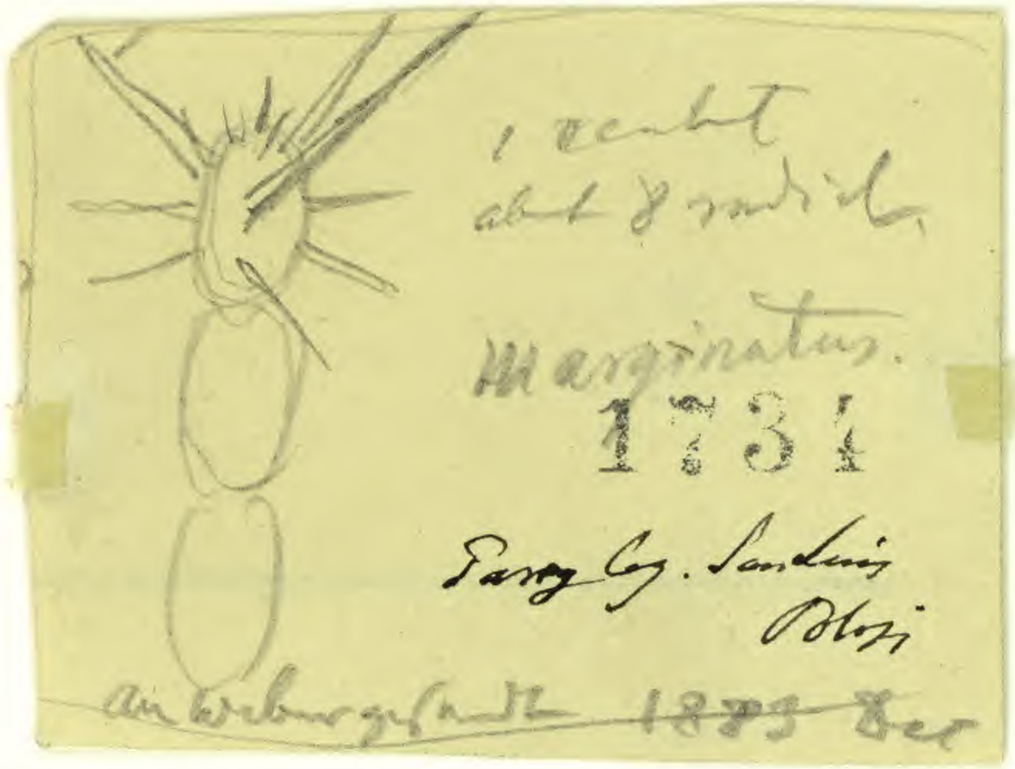

I recebi
abril 8 mais 6

Marginatus.

1731

Dans Cy. Sanctis
Polozi

an Weberg gesandt 1875 Oct

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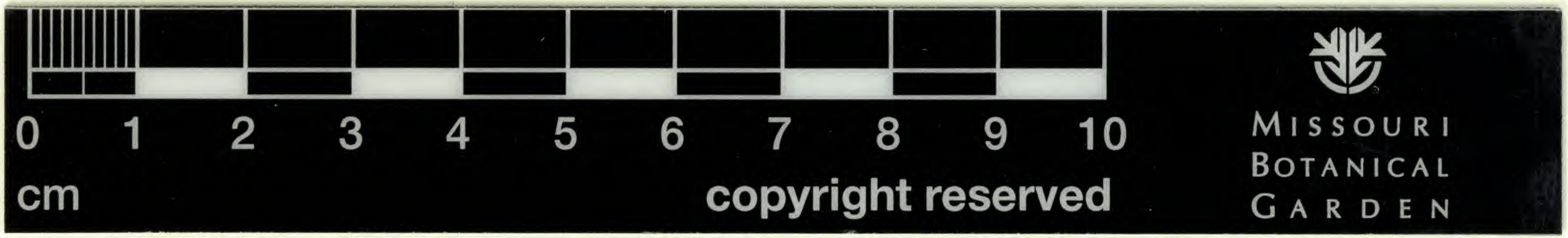
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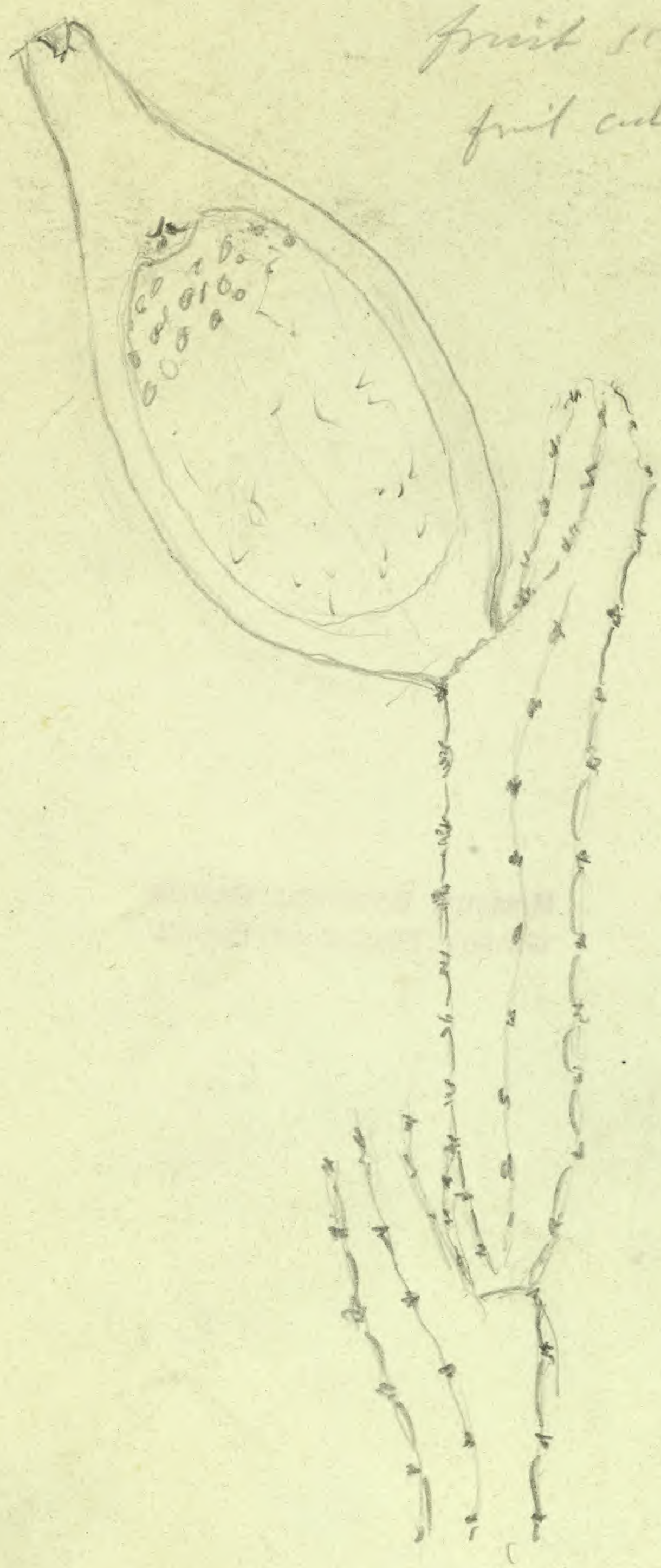
Tucson Sept 29 1880

Fruit scarlet, arrow-

fruit cut open

1735



Cir Greggii, collected on the Mesa south

of Tucson Sept 28 1880 in returning

from the Santa Rita Mountains

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2 1736 [19-23 in Mex.]

Cereus gummosus n. sp. "Pitahaya"

Prostrate and assurgent with triangular branches
1 – 4 ft in length 3 – 4 inches diameter, rising – 2 or 3
feet, but too clumsy to hold itself up, hence sprawling below
ribs 7 – 9, of a dull greenish color.
Internal cellular tissue light yellow in dried
specimens thanking it a dense resinous gum
which is ground up and mixed with oil for
caulking also used as pitch for calking boats &c.
Mexicans say seem to be large and
palatable when boiled yields an elastic
in rocky slopes near Ensenada Lower Cal.
April 12th 1882 – C.C. Parry

Section of double stem

Spines ribs & small points see specimens.

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Cereus Gummosus

Lower California

Dec 20. 1882

anther
×10
3 mm long

stigma ×2
with 9 ridges

1737

40 or 50 ovarian sepals crowded
bearing gray wool and dark spines
abt 10 similar sepals on corolla
part of tube scattering
middle part of tube nearly naked, only 2 or 3
triangular sepals; upper part with abt 8 sepals

Greenish, purple
× 12–15 inner large oblong obtuse concave deeply
12–15 smaller shorter petals, white(?) the obtuse
nectaria cavity of tube abt 1 or 1¼ inch long;
stamens part 1½ or 1¾ inch long to base
of petals; upper most stamens very short, not longer than
anthers. stamens very numerous
anthers 3 mm long, style pink 9-angled
stigma — apparently undivided, clavate towards
the top
fruit subglobose 1 inch or ½ inch in diam tuberculated to become
densely covered with bunches of stout dark
gray spines, angular ½. ½ or ¾ inch long
stout, from large brown woolly areolæ
seeds obliquely obovate, strongly compressed,
carinate rugose-Tuberculate a line or a little
over long

ALEX. LEITCH
APOTHECARY & PHARMACEUTIST
COR. 4TH & OLIVE STS. ST. LOUIS.

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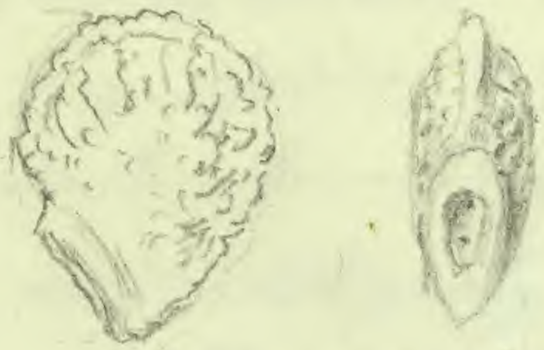
×8 Cereus gummosus Dec 19 1882



seed compressed,
keeled, rugose-tuberculate

VASEY HERBARIUM
1738

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1739

Cereus geometrizans

"Atahaya" Dr Parry Coy. April 12 1882

Prostrate, 1–4 feet long, 3–4 inches diam. assurgent

7–9 ribs, dull purplish green

ribs (a small branch before me 1½ inch diam)

8, obtuse with deep sharp narrow sinuses between

(probably rounded when older) tuberculated (ab.

each when young); areoles prominent at the upper

end of the tubercles, large orbicular areolar

3 lines wide, about 1 inch apart with very short gray

to maculate, and black spines

stout central one, somewhat

angular and finely cross-

ribbed 4–9 lines long,

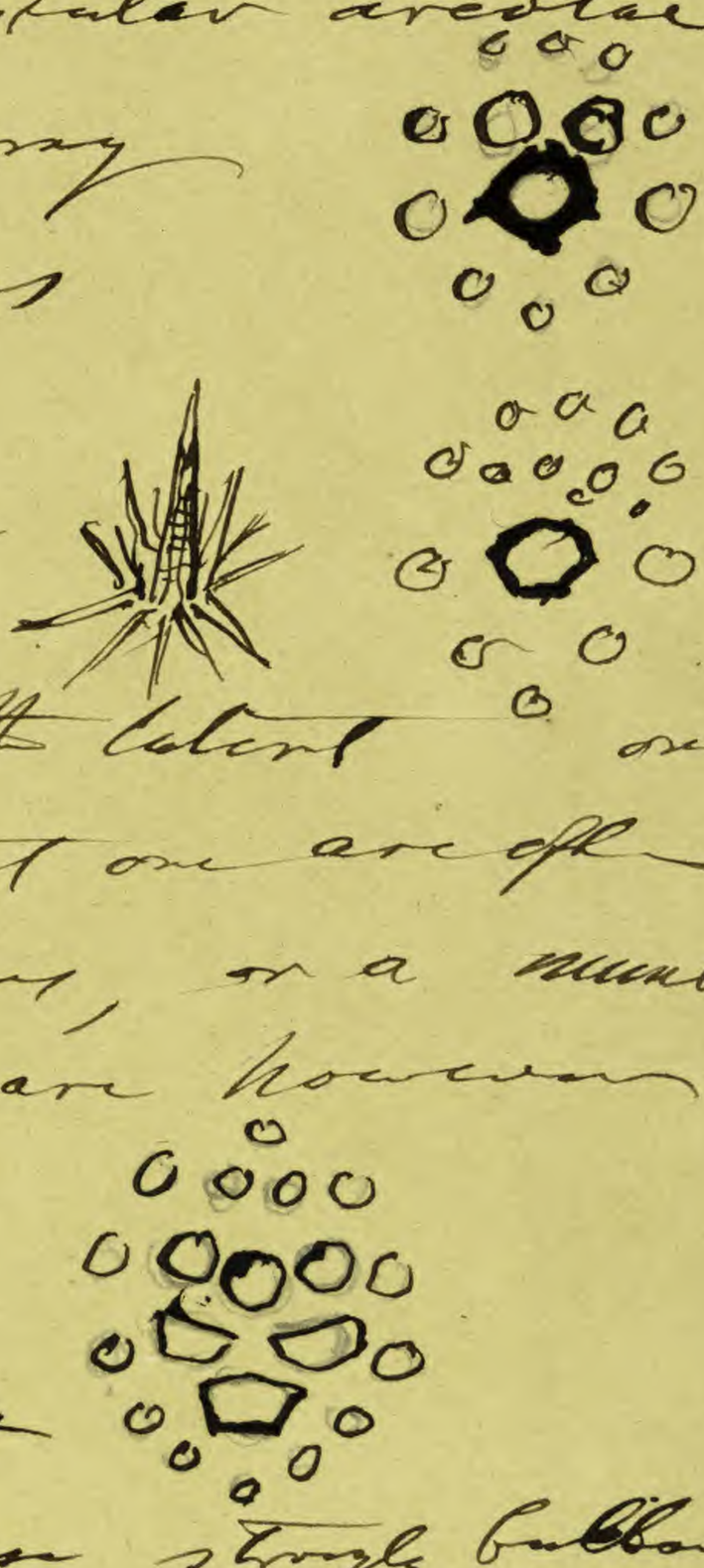
about 10 radial ones, of which the lateral ones

are the strongest; above the central one are often

a few stout secondary central ones, or a number

of weak ones; all spines are however

stout and rigid.



old spines areola 7 lines

long, oval, 9–10 lines apart

spines black at annulate; base strongly bulbous

stout, thick, somewhat angled

6 central with 2 very small ones above, 12 radial

smaller ones; central 9–12 lines long, lateral

3–6 long; lowest smallest.

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Wm M. Gabb No 6 Peninsula Cal 1867

Anaxonda

Chirinole

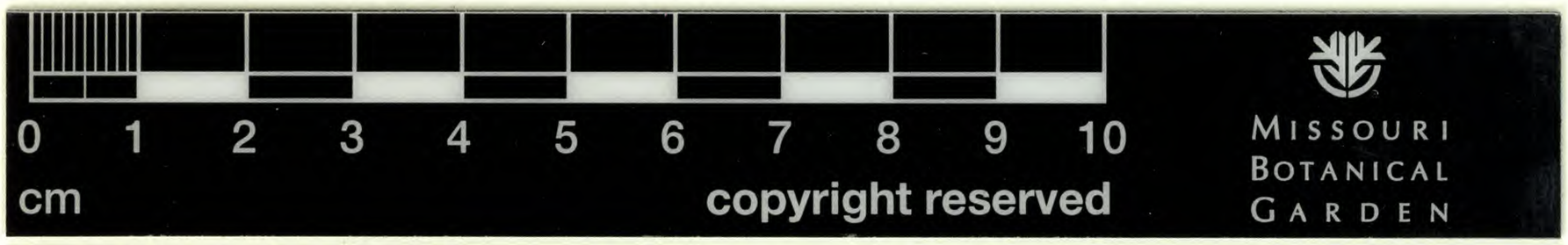
1740

Cereus Serpens

Prostratus repens & robustus, multicostatus & simplex seu parce ramosus
arcolis orbiculato ovatis prominenter pulvinatis
aculeis robustis rectis albereis numerosissimis (20–25)
spines sometimes three, often different stellatis, intermixtis 5.–8 ct deflexo-patentibus
robustioribus interiorem inferiorem complanato,
infra carinato deflexo.

In sandy plains near the west coast
from Soledad to Ballenas Bay

An uncouth looking plant, rarely more than
2–3 feet long, and 4–6 inches in diameter
and densely covered with the rigid ashy-colored interlacing spines
with apparently over 20 nbs V, (dying off continually)
at the lower end, and rooting with the under surface
creeping over and accomodating itself to every obstacle
often in large masses together, Arcolæ 1.0 cm
long ad 15 mm apart. Spines projecting stoutish
in every direction, V 1–3 cent long (sometimes
much longer, Gabb) and the single flattened deflexed spine
of each bundle about 3 mm wide at base and
3 cent or more long, Flower & Fruit unknown.



MISSOURI BOTANICAL GARDEN
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the

№ 6

Plant cu

in diamete

more than

dying off

few inches o

itself to

and anch

square yar

a dozen

at random

with numer

together as

standing on

front & fro

grows on the

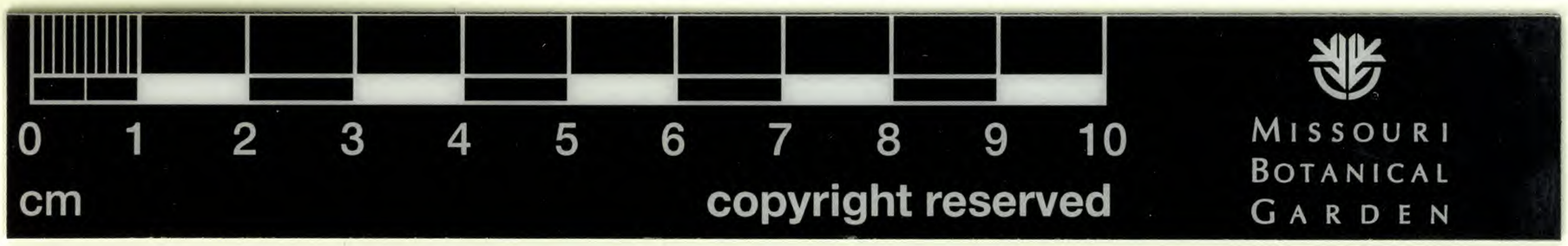
Soledad

istic. Some

№6 Cereus (Chirinole)

Plant entirely recumbent, rarely branched, 4-6 inches in diameter, ribs numerous and prominent; rarely more than 2 or 3 feet long; in patches, the older portions dying off — rooted on the under surface — Sometimes a few inches of the latest growth erect — It accomodates itself to the surface, one stem creeps over the other, and arches over the impediment. Sometimes many square yards are covered by it — Looking from a distance like a lot of fire wood thrown at random on the ground. Surface of the plant covered with innumerable large rigid spines, placed so close together as to interlace; a larger three edged spine standing out more prominent than the others, from each group & pointing backwards. Fruit & flower unknown — Grows on the sandy plain adjoining the West coast, from Soledad to Ballenas Bay. The specimen is very characteristic. Some show much larger spines

rib dilated a little at the insertion of each group of spines & contracted between them



in diameter, ribs numerous & prominent; rarely more than 2-
or 3 feet long; grows in patches, the older portions dying as
it creeps along the ground, rooted by its under surface,
sometimes a few inches & the newest part partially erect;
where one branch lies across another it accommodates itself
to the irregularity of the surface, arching over the impediment.
Sometimes an area of many square yards will be covered by
this plant, looking not unlike a lot of fire wood thrown

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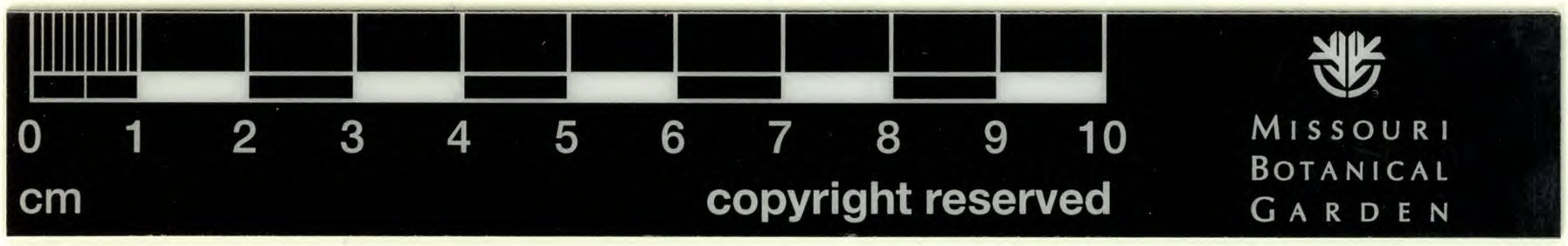

C. acuminiformis Hort Berol Chrsby

Linn. 19. 363

700-8000' all - flowers crimson. - green
delicious fruit, pitahaya, cereus
with bristles

362 C. acuminatus H - ½-1 foot high
?? purple fl. crimson, green, bristly
very sweet fruit, Atahaya

363 C. geometrizans 40-50 feet high - full
Garambullos, like Whetteanus description

364 C. marginatus - arborescent - yellow fruit
not edible - spiny - fl. yellowish green
C. geometrizans ? very similar

365 C glaucus ? 20' high tree also Atahaya
(Whetteanus ? see page 359

366 C scandens

C. peruvianus

C. cochinensis

365½ C. acanthurus DC ? spiny not edible
high tree

" - polylophus 40' high

1741

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April 14

Dr Engleman

Sir we wish to know what to do for our baby's mouth it is very sore and running we have and are using vaseline on it can you send something better or shall we continue with the same or if you will think it worth while to come out and see it, all round the navel and lower bowels seem a little swollen.

Respectfully Frances Stokes

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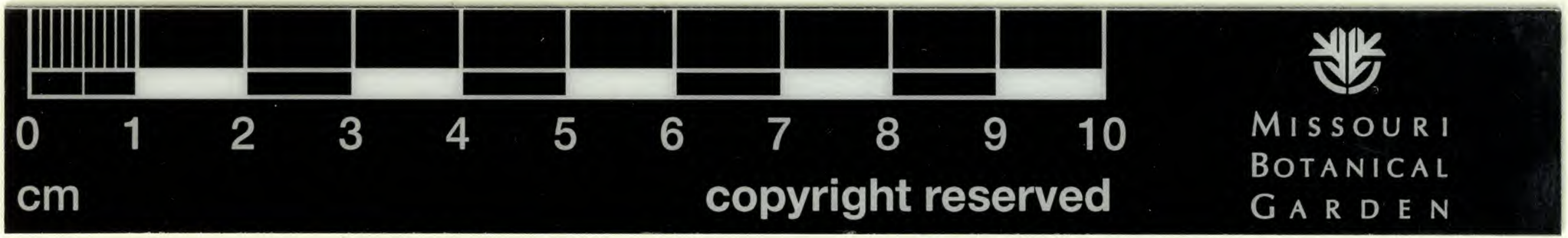
Cereus gigantaeus, Shrubby tree to 8 Branches, from near
Mexico, Acut, 2 Spot

1742

One cut down at
below 15 high up
Branches with 21 ribs

Tucson was 25 high, Diameter
18–19 inches, 5 feet from ground



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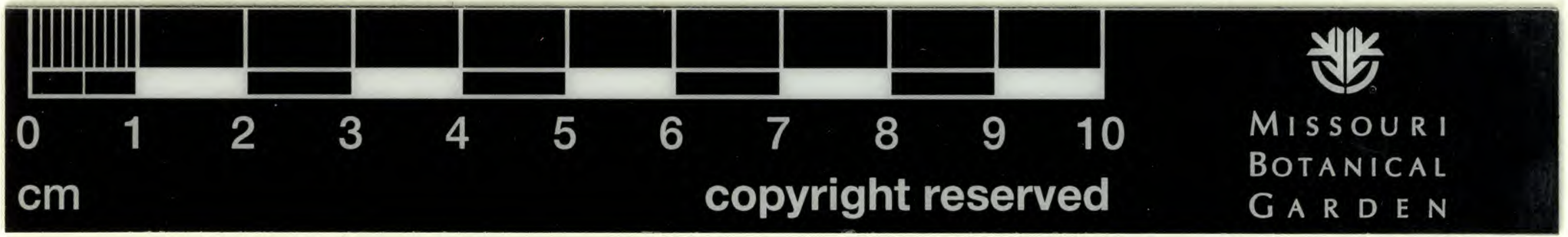

1743

Hort Shaw — July 12 1877

sweet flowers

petals

8–10 ovary 1 celled

8 ovules — tube

13 stamens — sepals obtuse

18–21 upper inner sepals 4

stamens 13 petals. 11

pistil 13 stigmata

nectaria 5 cavity

1

ovary

11 celled

with about 8-10 minute ovules in each cell

ovary 1 Tube 2 inches, limb 5 inches = 7 inches long

nectaria cavity 22 lines long

stamens at top of tube 2 inches — no crown of stamens

petals about 2½-3 inches by 13 pure white

13 filiform stigmata 7–8 lines long

pistil externally green brown, petals white

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J. G. A.

In. H.

Documents.

Department of the Interior,

Washington, June 9, 1877.

Sir:

I have the honor to send to your address, by mail, this day, the following documents, viz:

Lists of Elevations, at the request of the author, Mr. Henry Gannett; and also Uinta Mountains and Atlas by Powell

Bulletin 2 & 3. Vol. 3. Hayden

" 2 Entomological Commission

MISSOURI BOTANICAL GARDEN
GE RGE ENGELMANN PAPERS

Very respectfully,

A. S. Pue

Asst. Secretary

Dr. Geo. Englemann
St. Louis
Mo

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Wm M Gabb No 5. Pitahaya agre Berkeley Calif 1867

flexuosus

~~Diffusus~~ Thurber??

~~acicularis~~

Diffusis

Cereus

saepe deflexis

major ~~fe~~ basi ramosus, ramis elongatis flexuosis

ramosis, profunde 6-8 costatis

areolis ovato orbiculatis remotis,

dum cinereis

aculei nigricantibus, robustis angulatis annulatis,

exterioribus subq impari infimo gracilibus

interioribus 1-4 robustioribus

baca globosa spinulosa purpurea

ovidula

1744

Branches 6-8 feet long; 3 or 4 inches diameter

lae (8-10 mm long 3 cent from centre to centre;

te speri- before me). Lower bunch has one

in fascicle 4 central spines — Exterior spines

interior 2½- 4½ cent long, apparently

different in different bunches.

Pitahaya agre

2

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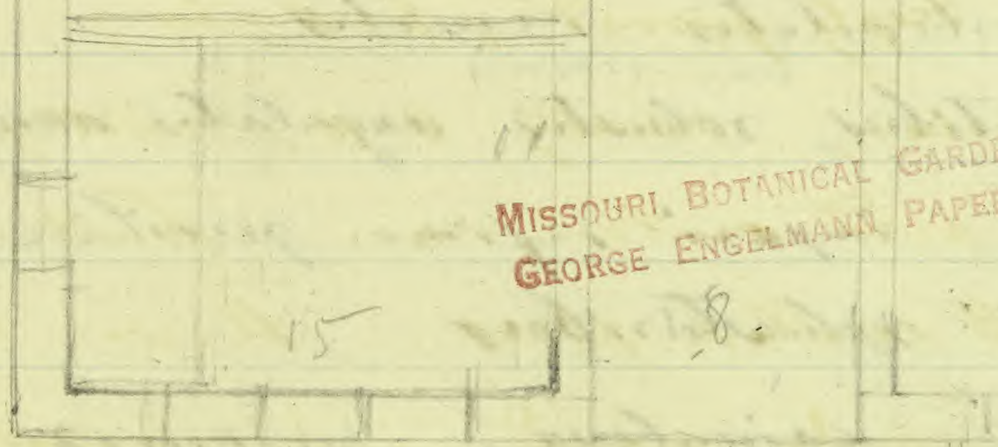

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No 5 Cereus (
Plant large, dark
starting from the bas
Diameter 3-4 inc
Flower large, nig
and are much ca
Globular
Grows in rock
ripe St Louis to
Ticket.
inches in diameter

0 1 2 3 4 5 6 7 8 9 10
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Cactaceae of the
Californian
Peninsula
Wm M Gabb 1867

№ 5. Cereus (Pitahaya agre) № 2 of sketch

Plant large, dark green, very straggling; branches 6-8 feet long and starting from the base, afterward sending off lateral branchlets; diameter 3-4 inches, deeply grooved; 6-8 ribs; spines large, rigid angular, usually 8-10 radiating smaller and one much larger erect central one. Fruit dark red globular, covered with smaller spines. Flower unknown.

Grows in rocky or sandy ground, indiscriminately, from Cape St Lucas to near Rosario, often making impenetrable thickets. Fruit slightly acid, much esteemed, 1-2 inches in diameter.

1745

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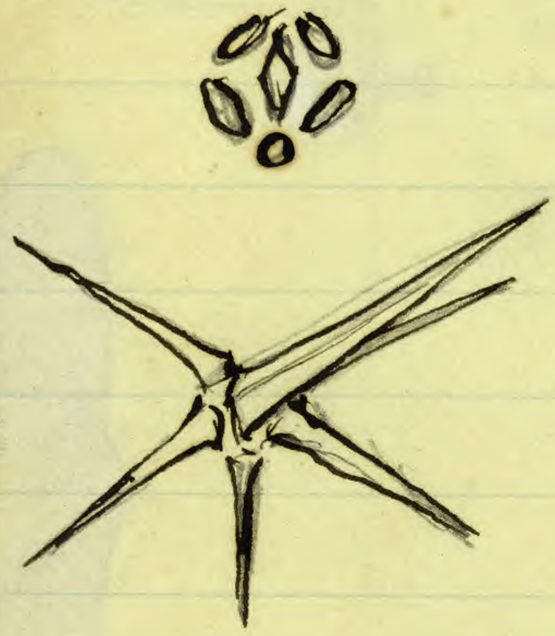
10th M Gabb No 8 California Peninsula 867

C. geometrizans ? no, but probably near,

Gabbii



Cereus Arbuscula 1746

e caule brevi robusto ramosissimus glauco-viridis; ramis robustis 4-7 costatis, sulcis fere planis areolis ovato-orbiculatis, distantibus; aculeis paucis robustis rectis ~~conspicuis~~ plerumque 5 centralibus robustioribus subulatis compressis (pollicaris); floribus parvis oligophyllis ~~brevibus stipitatibus~~ e fusco purpureis; baccis obovoideis

Trunk short, a foot or more high before it divides into numerous branches repeatedly branching so as to give the whole plant, which grows 4 or 6 feet high a graceful candelabra shape.

Areolae 8-10 mm long, nearly orbicular 2-2½ cm apart; radial spines 15-20 mm and the remainder laterally compressed 2½ mm long — the specimen before me. Flowers ~~2 to 6~~ 2 or 3 and 4 mm long scarcely 5 ovary Canescent, ~~obovate~~ tube also with about 5 ovate cuspidate sepals; inner sepals & petals oblong, obtuse, about 12, brown purple with orange border ~~to petals~~; ½ of the ovl. ~~linear~~ 5 linear obtuse stigmata 2 mm long nectariferous naked, anthers oblong; (Spine 3½ mm long) shape and size of an olive, smooth i.e. not spiny, but probably with cuneate areolae like sepals, but fruit evidently very much like Roseana Schottii, but vegetative parts quite different and uniform.

Formula of flower P. 10 mm
S 4
N 3
O 4
Fl. 21 mm

0 1 2 3 4 5 6 7 8 9 10
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MISSOURI BOTANICAL GARDEN

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GEORGE ENGELMANN PAPERS

Cereus ?

Cereus Gabbii Eng.
Lower C
Dried flower

0 1 2 3 4 5 6 7 8 9 10
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of the "No 8" Cereus? (Carambuya arborescent form)

Cereus Gabbii Eng. March 30th 1870
Lower California, Gabb.
Dried flower soaked

...n it be marginate?

×2

×2

Flower about 2 cent Long (=10 Mm)
- and 2½ in diam (=1 inch)
ovary with 5 lanceolate acute scales with short wool in axil; tube short with about 5 or 6 sepals (ovate-cuspidate) mostly upwards
Upper inner sepals 5-6 as long as the 5-6 petals, oblong, obtuse in 7
nectariferous naked part of tube
3½ mm long, staminiferous part 4 (flower) petals
anthers 1,6 mm long, oblong
stigmata 5, obtuse, linear,
2 mm long.

Formula of flower

P	10
S	4
N	3
O	4
Pl	21 mm

Pollen grain
× 415
surface of Pollen smooth

×10

Ovule

1747

1749

...ous

...30°

...ut dark

...ut-branches

...on

...the

...work, may

...but grooves

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J. McKittrick & Co. Cor. Main & Vine.

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No 8 "Cereus"

Plant 4 to 6

feet or more

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of the "No 8" Cereus? (Carambuya arborescent form)

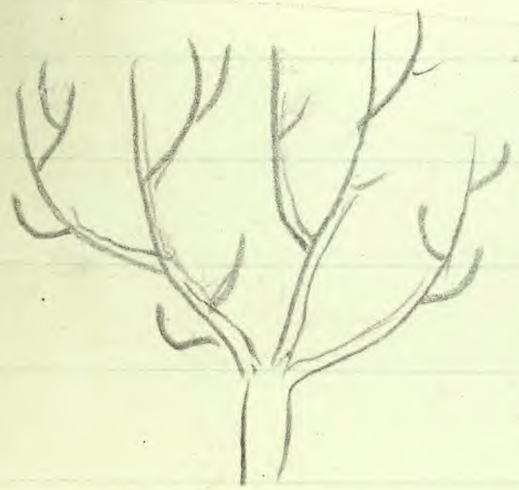
Plant 4 to 6 feet high, arborescent, Trunk sometimes

1867 a foot or more in height bet[illegible] dy off branches. Rear

upwards, having sub-branches

the appearance of a

re robust than the



No 8

not the usual tint!
flower 1 inch
Mark
fruit probably for last season — examination

1748

ribs about same, but grooves

No 7 off yellowish, may

further apart than in 7

ped (see dried flower) petals

brownish or purplish red, bordered by deep orange. Fruit dark

red olive shaped, with smooth surface.

1749

In rocky ground on the volcanic tables from

Comonda Lat 26° to near Rosario Lat 30°

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No 8

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0 1 2 3 4 5 6 7 8 9 10 cm
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"No 8 "Cereus" (Carambuya arborescent form)

Plant 4 to 6 feet high, arborescent, Trunk sometimes a foot or more in height before sending off branches. These start out laterally & gracefully bend upwards, having sub-branches all of which tends upwards producing the appearance of a Candelabrum. branches a little more robust than the preceding species (Cer Schottii) Number of ribs about same, but grooves much more shallow; Colour lighter than № 7 & yellowish, may be called a yellowish green". Spines further apart than in 7 and larger. Flower simple, bellshaped (see dried flower) petals brownish or purplish red, bordered by deep orange. Fruit dark red olive shaped, with smooth surface.

1749

In rocky ground on the volanic tables from Comonda Lat 26° to near Rosario Lat 30°

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cm

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797
9985

long, slender, yellowish spines, radiating, the central one or two
of each group long most | longer than the others. Flower small
& yellow – fruit cylindrical – woody skeleton cylindrical, soft